

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for preserving living mammalian cellular material, comprising:
 - incubating the mammalian cellular material in a culture medium containing at least one sugar for at least three hours; and
 - after said incubation, subjecting the mammalian cellular material to a preservation protocol,
 - wherein said culture medium contains from ~~0.1~~0.2 to 0.4M sugar, and wherein the at least one sugar comprises trehalose.
2. (Currently Amended) The method of claim 1, wherein said mammalian cellular material is a cell culture.
3. (Withdrawn-Currently Amended) The method of claim 1, wherein said mammalian cellular material is a natural or man-made tissue or organ.
- 4.-6. (Cancelled)
7. (Currently Amended) The method of claim 1, wherein said mammalian cellular material is incubated in said culture medium containing at least one sugar for from 3 to 120 hours.
8. (Currently Amended) The method of claim 1, wherein said mammalian cellular material is incubated in said culture medium containing at least one sugar for at least 6 hours.
9. (Currently Amended) The method of claim 1, wherein said mammalian cellular material is incubated in said culture medium containing at least one sugar for at least 12 hours.

10. (Currently Amended) The method of claim 1, wherein said mammalian cellular material is incubated in said culture medium containing at least one sugar for at least 18 hours.

11. (Currently Amended) The method of claim 1, wherein said mammalian cellular material is incubated in said culture medium containing at least one sugar for at least 24 hours.

12. (Currently Amended) The method of claim 1, wherein said mammalian cellular material is incubated in said culture medium containing at least one sugar for at least 48 hours.

13. (Currently Amended) The method of claim 1, wherein said mammalian cellular material is incubated in said culture medium containing at least one sugar for at least 72 hours.

14. (Currently Amended) The method of claim 1, wherein said mammalian cellular material is incubated in said culture medium containing at least one sugar for at least 96 hours.

15. (Currently Amended) The method of claim 1, wherein said preservation protocol comprises at least one of cooling the mammalian cellular material and drying the mammalian cellular material.

16. (Original) The method of claim 15, wherein said preservation protocol is selected from the group consisting of freezing, vitrification, freeze-drying and desiccation.

17. (Currently Amended) The method of claim 1, wherein said preservation protocol comprises cooling the mammalian cellular material in said culture medium containing at least one sugar.

18. (Original) The method of claim 17, wherein additional cryoprotectant is added to said culture medium prior to cooling.

19. (Original) The method of claim 18, wherein said cryoprotectant includes at least one sugar.

20. (Original) The method of claim 18, wherein said cryoprotectant is selected from the group consisting of acetamide, agarose, alginate, alanine, albumin, ammonium acetate, anti-freeze proteins, butanediol, chondroitin sulfate, chloroform, choline, cyclohexanediols, cyclohexanediones, cyclohexanetriols, dextrans, diethylene glycol, dimethyl acetamide, dimethyl formamide, dimethyl sulfoxide, erythritol, ethanol, ethylene glycol, ethylene glycol monomethyl ether, formamide, glucose, glycerol, glycerophosphate, glyceryl monoacetate, glycine, glycoproteins, hydroxyethyl starch, inositol, lactose, magnesium chloride, magnesium sulfate, maltose, mannitol, mannose, methanol, methoxy propanediol, methyl acetamide, methyl formamide, methyl ureas, methyl glucose, methyl glycerol, phenol, pluronic polyols, polyethylene glycol, polyvinylpyrrolidone, proline, propanediol, pyridine N-oxide, raffinose, ribose, serine, sodium bromide, sodium chloride, sodium iodide, sodium nitrate, sodium nitrite, sodium sulfate, sorbitol, sucrose, trehalose, triethylene glycol, trimethylamine acetate, urea, valine and xylose.

21. (Cancelled)

22. (Currently Amended) The method of claim 1, wherein said culture medium contains ~~from 0.1 to 0.3 M~~ 0.2M sugar.

23. (Currently Amended) The method of claim 1, wherein said preservation protocol comprises cooling said mammalian cellular material in a cryoprotectant-containing solution.

24. (Original) The method of claim 23, wherein said cryoprotectant-containing solution comprises at least one sugar.

25. (Original) The method of claim 23, wherein said cryoprotectant-containing solution contains at least one cryoprotectant selected from the group consisting of acetamide,

agarose, alginate, alanine, albumin, ammonium acetate, anti-freeze proteins, butanediol, chondroitin sulfate, chloroform, choline, cyclohexanediols, cyclohexanediones, cyclohexanetriols, dextrans, diethylene glycol, dimethyl acetamide, dimethyl formamide, dimethyl sulfoxide, erythritol, ethanol, ethylene glycol, ethylene glycol monomethyl ether, formamide, glucose, glycerol, glycerophosphate, glyceryl monoacetate, glycine, glycoproteins, hydroxyethyl starch, inositol, lactose, magnesium chloride, magnesium sulfate, maltose, mannitol, mannose, methanol, methoxy propanediol, methyl acetamide, methyl formamide, methyl ureas, methyl glucose, methyl glycerol, phenol, pluronic polyols, polyethylene glycol, polyvinylpyrrolidone, proline, propanediol, pyridine N-oxide, raffinose, ribose, serine, sodium bromide, sodium chloride, sodium iodide, sodium nitrate, sodium nitrite, sodium sulfate, sorbitol, sucrose, trehalose, triethylene glycol, trimethylamine acetate, urea, valine and xylose.

26. (Original) The method of claim 23, wherein said cryoprotectant-containing solution contains 0.1 to 2.0M sugar.

27. (Original) The method of claim 26, wherein said cryoprotectant-containing solution contains 0.2 to 0.6M sugar.

28. (Currently Amended) A method for preparing living mammalian cellular material for preservation, comprising incubating the mammalian cellular material in a culture medium containing at least one polysaccharide for at least three hours, wherein said culture medium contains from ~~0.1~~ 0.2 to 0.4M polysaccharide, and wherein the at least one polysaccharide comprises trehalose.

29. (Currently Amended) The method of claim 28, wherein said mammalian cellular material is a cell culture.

30. (Withdrawn-Currently Amended) The method of claim 28, wherein said mammalian cellular material is a natural or man-made tissue or organ.

31. (Cancelled)

32. (Currently Amended) The method of claim 28, wherein said at least one polysaccharide further comprises sucrose and/or raffinose.

33. (Currently Amended) The method of claim 28, wherein said mammalian cellular material is incubated in said culture medium containing at least one polysaccharide for from 3 to 120 hours.

34. (Cancelled)

35. (Currently Amended) The method of claim 28, wherein said culture medium contains ~~from 0.1 to 0.3M~~ 0.2M polysaccharide.